



Located in the Lake Burden community in Windermere, FL, the KB Home GreenHouse™ is expected to produce as much energy as it consumes.

HOT-HUMID CLIMATE**BUILDER PROFILE**

Builder: KB Home, Central FL Division
Orlando, FL

Description: KB Home, one of the nation's premier homebuilders, has delivered over half a million quality homes for families since its founding in 1957. The Los Angeles-based company is distinguished by its Built to Order™ homebuilding approach that puts a custom home experience within reach of its customers at an affordable price. KB Home was recently ranked #1 Green Homebuilder by Calvert Investments and is also one of FORTUNE magazine's World's Most Admired Companies for six years running and ranked #1 for Innovation among homebuilders in 2010.

**Builders Challenge**

Recognizing Energy Leadership in Homebuilding

High Performance Builder Spotlight**KB Home GreenHouse™**

An Idea Home Created with Martha Stewart

KB Home GreenHouse™ Statistics

2,667 square feet, 3 bedroom + flex room, 2 bath

Performance Features & Certifications Achieved

- DOE Builders Challenge Maximized Energy Efficient Home
- ENERGYSMART™ Home Scale (E-Scale) = 0
- US EPA ENERGY STAR® qualified and WaterSense Labeled
- USGBC LEED for Homes® Platinum
- Environments for Living® Certified Green

Thermal Shell

- R-21 roof deck insulation, R-11 walls (foam injected CMU + rigid foam)
- ENERGY STAR® double pane, Low E vinyl frame windows (U=0.36, SHGC=0.18)

Heating & Cooling

- ACCA Manual D sized ducts & Manual J sized cooling/heating equipment
- 2 ton dual speed high efficiency air source heat pump (SEER 19, HSPF 9.2)
- Programmable thermostat

Water Heating & Distribution

- 54 ft² active solar domestic hot water system, 80 gallon storage tank
- WaterSense® labeled faucets, toilets, and showerheads
- PEX plumbing & on-demand hot water recirculation system

Renewable Energy, Efficient Appliances & Lighting

- 8.6 kWp building integrated photovoltaic array
- ENERGY STAR® qualified lighting & appliances
- Real-time energy and water use monitoring system
- Electric vehicle-ready

Comfort & Indoor Environmental Quality

- Performance tested duct system inside conditioned space
- Whole house dehumidifier and energy recovery ventilator (ERV)
- VOC source control including low VOC paint & CRI Green Label Plus certified carpet

Showcasing High Performance Construction at International Builders Show

The innovative and expertly-designed KB Home GreenHouse is the 13th in Builder Magazine's Concept Home series tradition that annually showcases an impactful and interesting new concept in home-building during the industry's premier trade conference, the International Builders' Show (IBS). This is KB Home's first home that is designed for maximum energy efficiency, and to produce as much energy as it consumes. Additionally, the home has been recognized with a variety of efficiency certifications including the U.S. DOE Builders Challenge, U.S. Environmental Protection Agency's ENERGY STAR® and WaterSense® qualification, LEED for Homes® Platinum and Environments for Living Green.

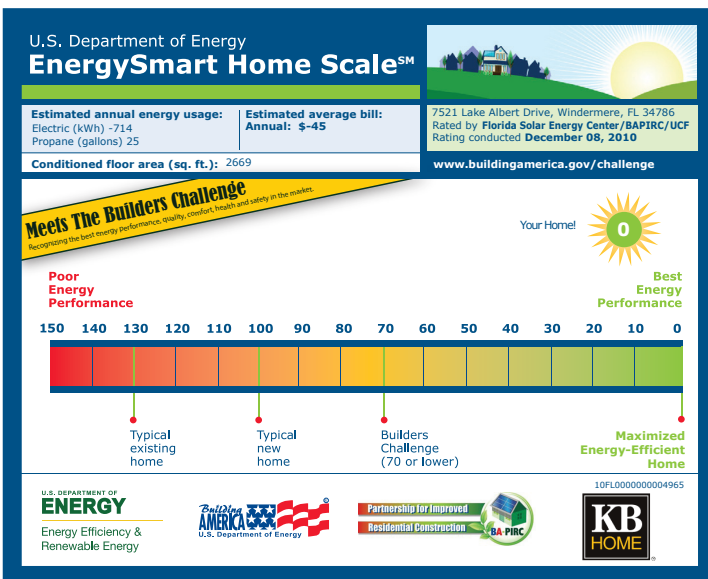


Photo courtesy of KB Home

While the KB Home GreenHouse™ is a one-of-a-kind Concept Home, similar KB/Martha Stewart homes will be built by KB Home at its new Mabel Bridge community, also in Orlando, FL.

US Department of Energy Builders Challenge

Homes that qualify for the Builders Challenge must achieve a 70 or less on the EnergySmart Home Scale (E-Scale) which is based on the Home Energy Rating System (HERS) Index (www.natresnet.org). Homes must also meet Quality Criteria for building durability, indoor air quality, environmental stewardship, and occupant health, safety, and comfort. The E-Scale allows homebuyers to understand-at a glance-how the energy performance of a particular home compares with others.



To learn more about the Builders Challenge and find tools to help market your homes visit www.buildingamerica.gov/challenge

Contact Information

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For information on Building America visit www.buildingamerica.gov. The website contains expanded case studies, technical reports, and best practices guides.